

(13.)

REMARKS

ON

MEDICAL REFORM;

IN A SECOND LETTER

ADDRESSED TO

THE RIGHT HON. SIR JAMES GRAHAM, BART.,

ONE OF HER MAJESTY'S PRINCIPAL SECRETARIES OF STATE, &c.

BY

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MEDICAL REFORM.

SIR,

I HAD the honour of addressing you in June last, when it was understood that the state of the Medical Profession was under your consideration with a view to the introduction of some changes in its arrangement. On that occasion I ventured to press upon your attention the claims of the GENERAL PRACTITIONER, and endeavoured to show that the establishment of a good and uniform system of education, applicable to all candidates for licences to practise, was the primary object to be kept in view in any scheme of Medical Reform. I recommended the union of the Colleges of Physicians and Surgeons, in order to embrace in one great Corporate Institution all the members of the profession. I endeavoured to show that this union might be effected without disturbing the distinctions and grades which are recognised in the profession, whilst it could not fail to raise the character of Medical Practitioners generally, promote harmony among them, and advance the

cause of medical science. I expressed my belief that the continuance of the Apothecary's Company would be injurious to the profession, and that the practice of Pharmacy ought to be separated from that of Medicine. I also ventured to predict that little permanent advantage could result to the present Colleges from any change in their constitution, which had not for its direct aim and object the good of the whole profession, and, of course, the benefit of the public; believing, as I do, with Dr. Barlow, that "no reform can have a chance of permanency, unless, while it provides for the welfare, efficiency, and respectability of the profession, it also adapts itself to those wants of the public which have been so unequivocally demonstrated; namely, by supplying an adequately qualified class of General Practitioners.*" (*Note A.*)

I have the satisfaction of knowing that my views met with the concurrence of many of the most enlightened men in the profession throughout the kingdom. They even found favour with some of the most strenuous advocates for the separate existence of the present corporations. A much greater number of the members of these bodies, no doubt, viewed my opinions in a different light: nevertheless, I venture to hope, Sir,

* British and Foreign Medical Review, vol. ix., January,

that you will give them, as well as the suggestions which I have now the honour of laying before you, your mature consideration before completing your promised measure of Medical Reform.

My principal object in addressing you at present is to urge the necessity of so framing the legislative enactment which you are about to introduce, as thereby to secure to all who are permitted to engage in the practice of medicine a GOOD EDUCATION. This is unquestionably the most important part of what is implied by Medical Reform, and that calling most loudly for the interference of the Legislature. Until it is obtained, any scheme of reforming or modifying the existing medical corporations will, in my belief, be productive of little benefit to the profession and less to the public.

Enactments enforcing a certain amount of education before a licence to practise medicine can be obtained, form, I believe, part of the legal code of every state in Europe except our own. Yet in no country is such control more wanted than in this, where so many irresponsible bodies possess the power of granting degrees in medicine or of licensing medical practitioners—no two of them agreeing on the amount of instruction and qualifications required of their candidates.

In order that you may be thoroughly satisfied

of the necessity of establishing a good and uniform scheme of medical education,* it will suffice, I think, to place before you the actual state and relative position of medical practitioners in this country, and to compare the present condition of things with that which existed some fifty years ago.

Three classes of medical practitioners are recognised in this country : Physicians, Surgeons, and Apothecaries ; each class having its respective corporation, and each corporation its distinct and separate interests.

Within the last thirty years, medical science has advanced at an unusually rapid rate, in consequence chiefly of the general diffusion of knowledge, the result of the free intercourse which has existed among men of science of all nations since the establishment of the general peace of Europe. The education of medical men has also, during this period, been greatly improved, although not to such an extent in this country as in some others. Here its progress has been

* By uniformity of education it is not meant that there should be any interference with the mode of teaching, but that the *minimum* of preliminary and professional acquirements should be fixed according to a similar standard throughout the kingdom. The utmost freedom should be accorded to the pupil, consistent with his own advantage, in acquiring his instruction, and every encouragement given him to exceed the required *minimum*.

retarded by various causes, but chiefly by the existence of a number of institutions which, while they possess the power of regulating medical education, have interests at variance with the proper direction of this power to raise the standard of the acquirements of those for whom they legislate.

Yet, notwithstanding these and other obstacles, medical education has made considerable advances among us, more particularly of late years. Medical practitioners of all classes are now much better acquainted with the structure and functions of the living body in a state of health, and with the causes and nature of those changes which constitute disease; and they are also possessed of more resources in the treatment of disease, than were their predecessors at the commencement of the present century. The rate of improvement has not, however, been equal in the three classes of medical practitioners. The Apothecaries, who had most to learn, have made greater advances in this respect than the Physicians and Surgeons; generally speaking, they may indeed be said to have risen from a state of comparative ignorance and inferiority, to emulate the latter in professional acquirements, and to share with them the confidence of the public.

As a natural consequence of this state of things, a material change has taken place in the duties

and relative position of the Apothecary and of the other two classes. From being the humble individual whose duty it was implicitly to follow the directions of the Physician, and compound the drugs which he prescribed, the Apothecary has gradually risen to be the ordinary medical attendant of the great bulk of the population; and, for the most part, he is now only required to summon the Physician to his aid in cases of difficulty or danger. Such, at the present day, is the position of the Apothecary, or, as he is now more appropriately styled, the General Practitioner. The expectant mother during her pregnancy is under his direction; he conducts her through the often critical period of parturition, and her offspring from the moment of birth is his accustomed charge. Can a medical man have more important or more responsible duties confided to him? Ought any man to be intrusted with such duties who has not brought a well-instructed and disciplined mind to the study of a profession involving such vital interests? And is it not the duty of the legislature to take care that no man shall be licensed to undertake these duties without having adduced proofs of being qualified to perform them? These are questions which admit of being answered in one way only. Upon the skill and judgment of the General Practitioners depends mainly the health of the

community: because they are, as we have seen, the ordinary attendants of the great body of the people; and the diseases of almost all ranks come under their care at their onset—the period, be it observed, when disease is much more under the control of efficient medical treatment than at any other: upon judicious management during the first few days—it may be hours—of an acute disease, depends very often the result of the case.

The relation of the Apothecary to the Surgeon has been no less altered; and, as a consequence of this, the character of the Surgeon's practice has undergone a remarkable change.

Not many years have elapsed (some Surgeons now living have, no doubt, witnessed the change) since Surgeons of Hospitals, and those who have been styled pure Surgeons, were alone intrusted with the treatment of surgical diseases, and with the performance of all operations of any consequence. Patients with local disorders requiring operations were brought from great distances to London and other large towns where operating Surgeons were only to be found. At present, on the contrary, General Practitioners in the smaller towns, and even in villages over the whole country, are frequently called on to perform the most important operations in surgery, in cases where

the patient must lose his life were immediate assistance not procured. A considerable part of the practice of the Surgeons, as well as of the Physicians, has thus fallen into the hands of the General Practitioner; and the result has been, that the Surgeons, finding themselves deprived of a large share of what they were accustomed to consider their legitimate right, now undertake the treatment of purely medical as well as surgical diseases; differing in their practice from the General Practitioners only in not attending to midwifery, and not supplying their patients with medicines.

From this exposition of the relative position and functions of the three different classes of medical practitioners, it will, I think, be admitted,—First, that the duties of the General Practitioner are not the least onerous or important; and, secondly, that the professional duties of the three classes being essentially the same, so ought to be their medical education—up, at least, to that point which is considered sufficient to qualify for general practice.*

* There are two branches of medicine in which the examination might be optional with the candidate; namely, OPERATIVE SURGERY and PRACTICAL MIDWIFERY. Those who do not intend to practise in these departments need not be examined upon them.

For these and other reasons, there should, I think, be but one PRESCRIBED course of medical education exacted by the state; it should comprehend what is necessary for every medical practitioner; and it should be the same throughout the empire.* This I consider the fundamental principle upon which a legislative enactment on the subject of Medical Education should be based. Whatever department of the profession the medical man may choose as the field of his practice, to practise that part properly he must be acquainted with the whole. When possessed of such general knowledge of his profession, the practitioner may, by devoting his attention to one department chiefly, be fairly supposed to excel, and generally will excel, the man who practises them all. Thus one man by directing his principal attention to the investigation and treatment of diseases affecting internal organs and the general system, another by directing his chief attention to the diseases and injuries of the external organs and the operations and mechanical

* I do not mean by this that the precise course or amount of education should be prescribed by the legislature, but merely that the new Bill should contain provisions whereby a good education could and *would* be enforced. Whether this be done by the legislature or by an authorised Board is of no consequence, so it be certainly done.

appliances required for their cure, may each attain, in their respective departments, a degree of perfection which cannot be expected of him whose attention is divided among the whole range of human infirmities and accidents. Hence there will always be Physicians and Surgeons who, in addition to their individual practice, will be consulted by the General Practitioner in all dangerous and obscure diseases; and every honourable inducement should be held out to encourage men to qualify themselves for such responsible positions by a higher preliminary education, and a more extended course of professional instruction, than could be laid down as the rule for all medical practitioners. But, as Dr. Thomson has justly remarked, "It is in the proper education of the whole body of the members of the medical profession, and in the experience which particular individuals may acquire by extensive private practice, or by attendance in dispensaries or hospitals, that the public have their best, and indeed their only securities for an adequate supply of intelligent and experienced Consulting Practitioners. The Legislature, therefore, will have performed its duty when it shall have taken care that no one can be licensed to enter on the practice of medicine without such preparation as a thorough preliminary and professional education

can afford.*" Beyond the requirements necessary to obtain a licence which should entitle the possessor to practise any and every branch of his profession — to qualify, in short, for a GENERAL PRACTITIONER — the Legislature need not, perhaps ought not to interfere with Medical Education or Medical Degrees. The regulations respecting honorary Degrees in Medicine may be safely left to the Universities and Medical Colleges.

Although medical education in this country is much superior to what it was, even a quarter of a century ago, it is still defective in all classes. The education of the Physician is defective, inasmuch as he is not generally instructed in all the departments of his profession. That of the Surgeon is still more limited. He has, in truth, been hitherto educated almost exclusively in surgery, whilst his practice is as much in medical as in surgical diseases: his knowledge of medicine is therefore generally acquired during the first years of his practice; and, moreover, the confined range of his medical education is unfavourable to his ever becoming a good Physician. The education of the General Practitioner, although much superior to what it was, has not, by any means, kept pace with the increase of his professional responsibilities. It is defective in several ways, but

* Dr. Thomson: *Life of Cullen*, vol. i., p. 497.

more especially in its preliminary or general part—in those departments of science, a knowledge of which is necessary to prepare him for entering on his more strictly professional studies. To bring the education of the General Practitioner up to the standard of his responsibilities it is that a legislative enactment is required.

Of the advantages which would accrue both to the profession and the public from the establishment of a better system of education throughout the empire for all medical practitioners, there will, I apprehend, be little difference of opinion. But upon the actual amount of that education, more especially as regards the general, or what has been termed the preliminary education, there may be much ;—such difference, however, arising not from any want of agreement respecting the utility, or even necessity of such preliminary instruction, but upon other grounds. The principal of these grounds are, I believe, the following:—1st. The difficulty of obtaining the requisite preliminary education ; 2nd, the want of means and time on the part of the student ; 3rd, the notion that if much general education is called for, there may be a deficiency in the number of young men entering the profession ; and 4th, the suspicion that men so educated would not undertake the drudgery of attending the poor.

The first objection might have had some weight

a few years ago, but has little or none at present, when public educational institutions, at which all the necessary instruction is given, are so general, that no town of any consequence is without one.

The second objection is inadmissible. The want of means on the part of the student is not a legitimate reason for not requiring the necessary education; but it does afford a conclusive reason why a youth, so circumstanced, should not enter the profession at all. The chief cause of the evils of which I complain has arisen from youths entering the profession totally deficient in preliminary education, and without the means of enabling them to obtain more than a *minimum* of medical education. Want of time will form no objection when the apprenticeship system is abolished; and I believe it has now scarcely an advocate. "An apprenticeship may unhesitatingly be pronounced pernicious, which absorbs either the means or the time that ought to be devoted to the acquisition of preliminary and scientific knowledge. And when we remember the circumstances under which a large proportion of medical apprenticeships are at present passed, at a distance from any school where either preparatory or professional knowledge can be acquired, and in the performance of a perpetual routine of menial ser-

vices, which could be performed with equal advantage to the public by the most uneducated,—such apprenticeships cannot but be considered as an arrangement in which the interests of those who are training to the medical profession are sacrificed to the interests of those who are already engaged in its practice.”*

A youth possessed of the natural talents which qualify him for becoming a medical practitioner may easily acquire the requisite preliminary knowledge, and much more, if his education be well directed, by the time he has reached the eighteenth or nineteenth year of his age. He has still four years to devote exclusively to the study of his profession ; for I agree with a late writer on Medical Reform, that young men are not generally fit to enter on the practice of their profession before twenty-three years of age.† At the same time, I admit that fixing a particular age may often be attended with great inconvenience and sometimes injustice to candidates : if, therefore, an age is fixed, it ought, I think, to be a minimum. If a good general education is enforced *before* the student enters on his medical studies, and if his practical knowledge, as well as his scientific acquirements in medicine, are

* Dr. Thomson : Life of Cullen, vol. i., p. 515.

† Quarterly Review, December, 1840.

well tested, the age need form no impediment to the candidate's obtaining a licence. When a young man has proved himself to possess a competent knowledge of his profession, he may fairly claim the privilege of exercising it. (*Note B.*)

The third objection to good preliminary education I consider of little weight. By requiring a higher standard of education, the profession would be made more respectable, and young men of a better class, and better educated, would be found in abundance, I doubt not, willing to enter it; and should it have the effect of diminishing the number of medical students, neither the profession nor the public would, I apprehend, be losers by such a result. At present, the medical profession is over-crowded; and if the enlightened views which are now being promulgated for improving the public health, more especially that of the working-classes, are fully carried out, the present proportion of medical men, may, I believe, be considerably diminished with perfect safety to the public.

With respect to the remaining objection—that well-educated young men would not submit to the drudgery of attending the poor—I believe it to be equally visionary with the others, and, at any rate, it will be time enough to legislate for such a case when it occurs.

Had the scientific education of medical men

been better attended to, the nation might have been spared the loss of much human life, and the fruitless expenditure of much treasure ; and the public health might have attained a much higher standard than it has yet reached. It is from being uninstructed in the common principles of philosophy, and consequently unacquainted with the laws by which the various physical agents amidst which we live are regulated, and the effects of these in promoting health and inducing disease, that medical men have failed in some of their highest duties—that they have been less efficient ministers of health and less successful investigators of disease than they would otherwise have proved. It is in the power, as it unquestionably is the duty, of the legislature to put an end to such a state of things ; and an excellent occasion now presents itself for improving the education of medical men generally, and, above all, in its most neglected, but not least important department—PRELIMINARY INSTRUCTION.

It would be out of place to discuss here the amount of acquirement in the different subjects necessary to prepare the student for entering with advantage on his professional education. But I venture a few remarks on the kind of knowledge requisite to prepare a youth for the study of medicine, because the subject is not generally un-

derstood, and yet may be easily comprehended by any one who gives it a little attention.

It is self-evident that the preliminary instruction of the Medical Student ought to comprehend at least those branches of literature and science which are absolutely necessary to enable him to understand his professional studies. For this object he requires a certain amount of classical knowledge, in order to read professional books and understand professional terms: he must be familiar with the common rules of arithmetic, and he ought to know something of geometry, to enable him to make the most common calculations or measurements; with the principles of physics or natural philosophy he must be acquainted, to understand some of the most important functions of the living body, and the operation of the various natural agents with which we are constantly surrounded, and which exert an unceasing influence in the preservation of health and the production of disease. In like manner the principles of chemistry are necessary to prepare him for comprehending the more complicated processes of that vital chemistry which is continually in action in the living body. Chemistry has hitherto been considered, but improperly, a part of the medical curriculum. It is no more a branch of medicine than is physics. The student should be well instructed in the principles

of both, before he commences his strictly professional studies. In the course of these he will have occasion to resume the study of chemistry in its higher departments—its application to physiology, to pathology, and to therapeutics; but to enable him to do so, a knowledge of the principles of chemistry ought to form part of his elementary education.

The elements of Botany should also form part of his preliminary instruction, and more especially the structure and functions of plants, as a preparation for entering on the study of the more complicated anatomy and physiology of animal life. Nor ought he to be ignorant of the other branches of Natural History, of Meteorology, Zoology, and Geology. Without some acquaintance with these sciences he could not understand or investigate some of the common causes of disease, or draw up the simplest medico-topographical account of any situation in which he might be placed : he would scarcely be qualified to perform the duties of a medical officer to a Poor-Law Union. In addition to an acquaintance with these branches of natural knowledge, which I deem indispensable, he ought to know something of the Philosophy of Mind, to guide him in reasoning correctly, and exercising his judgment on the subjects and objects presented to his observation during the study and practice of his profession.

Such are the branches of knowledge with which every youth ought to be acquainted previously to his commencing the study of Medicine. Without such preliminary instruction, and the mental discipline which it implies—and which, be it observed, forms an important item in the list—I do not hesitate to affirm that the student can never thoroughly understand Medicine as a science or practise it as an art, with satisfaction either to himself or full benefit to the public. Respecting the amount of acquirements to be exacted in each of the subjects enumerated, there is, no doubt, room for difference of opinion; but I regard the amount as of less consequence, in the first instance. Let the minimum fixed be very moderate, and the natural emulation of students and schools, and the daily increasing facilities for the acquisition of such knowledge will be the means of soon raising the standard of that minimum. It is hardly necessary to observe, that, however small may be the amount of knowledge required, it ought to be sound as far as it goes; not a smattering of the different subjects, but a knowledge of principles, upon which a superstructure may subsequently be reared.

Another point I consider as essential, namely that the preliminary instruction should be completed before the professional education commences. It is, I know, the opinion of some persons, that part of the general education may be

taken along with the professional. Such an opinion appears to me to be formed without sufficiently appreciating the great advantage which the student derives from being well prepared for his professional education. The great object of the preliminary or preparatory education, as it has been aptly termed, is to qualify the student for entering on his medical studies, and therefore ought to precede these. The advantages to the student arising from this arrangement are great and obvious: among others, it will enable him, from the very commencement of his medical studies, to devote his whole and undivided attention to them. The medical teachers will also be enabled to proceed at once with the proper subjects of their courses, without consuming, as they are at present obliged to do, a considerable time in attempting to explain those principles of general science which their course of instruction involves.

The student's medical education, so far from being retarded by his devoting a little more time than usual to preparatory instruction, will, on the contrary, be promoted: the information he will have acquired and the habits of mental application to which he will have been accustomed will enable him to comprehend his professional studies more easily; and, I may add, master them more thoroughly, and in a shorter period. Nor will the advantages of a good preliminary educa-

tion cease with the termination of the medical curriculum: in every step of his practice he will find his knowledge of general science coming to his aid.

I would, therefore, lay it down as a principle in the education of medical men—that the requisite preliminary knowledge should be acquired and tested, before the strictly professional studies commence. I am the more anxious to establish this point, because when the general is mixed up with the professional education, the former is very liable to be neglected; more especially by a certain class of students, whose great aim seems to be to present themselves for examination within the shortest allowable period from the commencement of their medical studies.

In proof of the almost total disregard of preliminary education, the following statement, recently made in a public lecture by Mr. Guthrie, will be admitted as unquestionable evidence:—“I regret to say,” observes that gentleman, “that among the students who entered the profession some years back, and are only *now* presenting themselves for examination under the regulations of 1836, there are many who cannot spell very common words in their native language.”* Mr. Guthrie has been long on

* Clinical lecture delivered in Westminster Hospital, Oct. 15, 1842.—See *Medical Journal*, Oct. 22, 1842.

the Council of the Royal College of Surgeons, and is therefore well acquainted with the acquirements of the candidates for the College Diploma. What these were before 1836 Mr. Guthrie does not inform us; but such, it seems, is the deplorable state of ignorance of a portion of those permitted at the present day to pass the Royal College of Surgeons of London! Are men so educated worthy of being intrusted with the important duties attaching to the ordinary medical attendants of the community? Is it surprising that quackery and quacks should thrive, when such is the education of the regular practitioner? * Natural talents and good sense may compensate, in some measure, for a defective education, and enable men to become good practitioners in a profession where so much depends upon the sagacity and powers of observation of the individual; but it is surely hazarding too much to permit men so ignorant as those

* In making these remarks upon the education of the general practitioners, I feel it due to that class of the profession to state that many of them are well-educated men, in every sense of the term; and not a few, graduates in Medicine of Universities of this or other countries—their Degrees not purchased, but won by severe study. My remarks apply to the system of admitting such men into the profession as Mr. Guthrie describes—a system which has proved highly detrimental to the character of the profession generally, and to that of the general practitioners in particular.

described by Mr. Guthrie to undertake the responsible duties of a Surgeon. Such a state of things ought not to exist in a civilized country, and would not have existed at the present day, had the institutions intrusted with the regulation of medical education done their duty.

But, however this may be, I trust, Sir, that you will not give your sanction to any scheme of medical education which does not include such an amount of preliminary instruction as I hope I have shown to be absolutely necessary to prepare every student for entering on the study of medicine. The Profession look to you, Sir, for this, the most important part of Medical Reform—that upon which the future character of the Profession, as a scientific body, must mainly rest. Those who object to a good preliminary education cannot, I feel assured, be aware of the rapid progress which education is now making generally in this country. The truth is, if the General Practitioner is not properly educated, he can neither command the respect nor the confidence of the public, nor maintain the position in society which every member of the Medical Profession ought to hold. Much has been said of the necessity of requiring high literary and scientific attainments of Physicians, in order to secure their high standing and character with the public. Any law for this purpose is quite unnecessary. Insist upon the

General Practitioner being well instructed, and you at once insure a still higher education for the Physician ; but the converse does not hold good, as experience has amply proved.

On the subject of the PROFESSIONAL EDUCATION of medical men I shall not occupy your time. Four years is the usual period required in good medical schools ; and if the student is prepared by a sound preliminary education, but not otherwise, this period may suffice. This was the extent of the medical curriculum for the Bachelor of Medicine, fixed upon by the Senate of the University of London ; and certainly no one can be considered qualified to enter on the practice of his profession, as a GENERAL PRACTITIONER, with less information, preliminary and medical, than that required by the Institution referred to. I trust, therefore, that it is not in contemplation to establish a class of medical practitioners inferior in point of education to the BACHELOR of MEDICINE of the University of London. Of the preliminary education required by that Institution you are perfectly qualified to judge ; and, I think, when you have examined it, you will be surprised to hear that any one should consider it too much. (*Note C.*) With respect to the MEDICAL CURRICULUM of the same Institution, I venture to assure you, without fear of contradiction, that nothing more is required of candidates than every

one ought to know before being intrusted with the treatment of disease. To establish a class of medical practitioners inferior to this, at the present day, would indeed be to make a retrograde step in medical education. Such a measure could not fail to exercise a most injurious influence on the progress of medical science in this country, by checking the impulse which has lately been given to a better education, preliminary and professional, of medical men. What would be thought of a proposition to establish an inferior or less educated class of clergymen for the poorer classes? And yet such a proposition would be much more reasonable than that of licensing a class of half-educated medical men. Diseases are the same whether they attack the rich or the poor; and the man who treats the latter requires no less skill than he who treats the former.

If, in an evil hour for the character of the medical profession and the progress of medical science in this country, it should be decided to keep a subordinate class of practitioners, required only to have a slender education, and to pass a slight examination—the amount of their education to be regulated, or at least tested, by the very bodies whose object seems to be to keep them in their present degraded position—I hope that a better educated class of General Practitioners may also be recognised, and that some

encouragement may be held out to induce medical students to prefer the latter. Let their qualifications be such as to entitle them fairly to the degree of Bachelors of Medicine, and give them the right of becoming members of the corporate body or bodies of the profession, and at no distant period the former class will, I trust, disappear.

But I cannot believe, Sir, after you have been made acquainted with the responsible duties of the General Practitioner, that you will recommend, or the legislature sanction, a scheme fraught with such injurious consequences to the profession, and such injustice to the public.

I can easily believe that you are not a little perplexed by the different opinions which you may receive on the education and position of the General Practitioner; but there is one test by which you may safely try those opinions, namely, the *minimum* education and the character of the man to whose care you would willingly trust your own family in a serious illness, when you could not call in the aid of the physician.

No good reason can, I think, be given why the Medical Practitioners in civil life in this country should have an inferior education to those in the public service: yet such is the case. The gentlemen placed at the head of the medical departments of the army and navy, Sir James M'Grigor and Sir William Burnett, dissatisfied with the

regulations of the Medical Institutions, have long required a more extended and varied course of study of the candidates for the medical departments of the army and navy than those institutions require of their licentiates. The number of applicants has not been diminished by these regulations; nor will the number of medical practitioners in private life be reduced, beyond the due proportion, by requiring them to possess an equally good, and even superior education; while the character of the profession as a scientific body, and the respectability of its members, will be greatly raised. I repeat my deliberate conviction, that you have only to say that the whole medical practitioners in this country shall in future have a good education, and the call will be readily responded to.

When the standard of medical education has been raised to what it ought to be, the next point for decision will be the formation of a body to whom is to be delegated the power of carrying out the principles of education laid down by the government. That power should, in my humble opinion, be intrusted only to an independent body, unconnected with the educating institutions on the one hand, and the medical corporations on the other; a body responsible to the government for its acts, having no collateral interests to divert its attention from carrying out

in the fullest manner the principles embodied in the legislative enactment. But I have stated my views on this subject in my former letter, and further reflection has only tended to confirm my opinion,—that this important trust should be vested in a body in each division of the kingdom, appointed by Government, for the exclusive purpose of regulating the course of education, preliminary and professional, and of testing candidates for licences to practise.

Unless the regulation of medical education is intrusted to such a body, it will be in vain to expect well-educated medical men. The subject of education must be taken up as a whole, and directed upon a well-devised system, otherwise it can never be successful. It has been because the regulations respecting the education of medical men have been intrusted chiefly to the Medical Corporations that the preliminary education has been so totally neglected. Such bodies are not qualified to test candidates on their scientific acquirements. It is not their province, and in no other country, I believe, is such a duty intrusted to them. If the Colleges of Physicians and Surgeons are to have any share in examining candidates, it should be restricted entirely to testing their practical knowledge. The selection of a proper body for this purpose, for regulating the education and testing the qualifications

of medical men, appears to me, in point of importance, in the accomplishment of a sound reform of the medical profession, second only to the establishment of a good preliminary and medical education to be required of every member of the profession as a condition of his receiving a licence to practise.

In thus advocating a liberal education for the General Practitioners, as the only means of insuring their respectability as a body and giving them a status in their profession, it must be evident to themselves that so desirable a change in their position cannot be effected until the dispensing of medicines ceases to be a part of their duty—until the practice of Pharmacy is separated from that of Medicine. In towns the separation may be effected without difficulty. In Edinburgh it may be said to be already accomplished. It is true that in villages and country districts the Practitioner would require to keep such medicines as were necessary for immediate use, more especially in the treatment of acute diseases. In such cases, however, the medicines ought not to form a separate charge, but be included in that for attendance, being considered in the same light as surgical instruments. But until the practice of Pharmacy is separated generally from that of Medicine, General Practitioners cannot attain that position in their profession

nor hold that station in society which they ought. The influence which such an arrangement in the practice of Medicine would exercise on the position of Medical Practitioners generally must be sufficiently obvious to every one who gives the subject a little consideration; but the far greater benefits which the public would ultimately reap from it can only be known to those who are acquainted with the present state of medical practice in this country.

Difficulties will, no doubt, present themselves to the establishment of a uniform scheme of medical education; but these difficulties are really less formidable than they at first sight appear to be.

The present Medical Corporations and the English Universities may oppose such a measure. The opposition of either ought to have little weight, if it can be shown to be unreasonable and opposed to the public weal; and assuredly whatever is opposed to the improvement of Medical Education and to the elevation of the character and respectability of the great body of Medical Practitioners is so.

With respect to the Colleges of Physicians and Surgeons, I endeavoured to show, in my former letter, what appeared to me to be at once their duty, and their interest, with regard to the General Practitioners.

The English Universities, and Trinity College, Dublin, claim, it is reported, some privileges for their graduates in the prescribed course of medical education. As the education of these institutions is higher, and occupies more time than could be required of all medical practitioners, some privileges may be fairly granted to their Graduates without infringing on the principle of uniformity of medical education. They would of course be exempted from any examination regarding their preliminary education. They might also be at liberty to pursue their medical studies how and where they pleased, attendance on the practical parts alone of the curriculum being exacted. The graduates in medicine of these Universities would in this way possess all the credit which the DEGREES of their respective Universities confer, while, at the same time, they would prove themselves competent medical practitioners, by possessing also the LICENCE of the Board appointed by Government for regulating medical education.

I cannot see upon what grounds these Universities can object to such an arrangement. From my knowledge of the medical professors of the English Universities, I have formed too high an opinion of their liberality and good sense to doubt their willingness to agree to what would so evidently benefit their own profession and the public,

without affecting the number, or the high literary and scientific character of their medical graduates.

I have now brought to a conclusion the few remarks which I have thought it right to submit to your consideration on the subject of Medical Reform, at a moment when you are about to lay before Parliament a measure for altering the present condition of the Medical Profession. If I have succeeded in impressing you with the necessity of raising the standard of Medical Education, and improving the position of the General Practitioner, as the paramount objects of such a measure, I shall have attained my object in addressing you on this and the former occasion. The character and the position in society of the General Practitioner are matters of much greater consequence to the public than is generally admitted or believed; and Medical Reform, in the enlarged view in which it ought to be regarded, is unquestionably a subject of national importance, and as such, well deserving the calm and dispassionate consideration of the Legislature.

I have the honour to remain,

Sir,

Your very obedient humble servant,

JAMES CLARK.

BROOK STREET, 13th *March*, 1843.

APPENDIX.

NOTE A. p. 4.

To no man is the Medical Profession so much indebted as to Dr. Barlow of Bath, for his able and unremitting exertions in the cause of sound Medical Reform; and whoever desires to make himself acquainted with the state of the profession in this country during the last half-century, and with the reasons for improving its condition, will find the subject treated in clear and forcible language in Dr. Barlow's various writings on Medical Reform, which extend over a period of nearly forty years. In 1807 he published, in the form of a pamphlet, or rather a small volume, his first 'Observations on Medical Reform.' In the 'Edinburgh Medical and Surgical Journal,' vol. xiv. 1818, vol. xvi. 1820, vol. xxviii. 1827; also in the 'Medical Gazette,' vol. xiii. 1834, will be found Essays by Dr. Barlow. And among several other papers in the medical journals of late, I may refer to an excellent view of the present state of the profession, and the reasons for a thorough reform of it, in the 'British and Foreign Medical Review,' vol. ix. Jan. 1840. Although, during the long period that his attention has been steadily directed to the subject, Dr. Barlow was often disheartened by the difficulties which have presented themselves to the accomplishment of his object, he never gave it up, but was always found at his post whenever an occasion presented itself in which he could urge with effect a cause which he had so warmly at heart. That enlightened physician and excellent man is now, I trust, about to reap the reward of his exertions for the improvement of his profession, in witnessing the accomplishment of a measure of Medical Reform founded upon those principles which he has so ably shown to be the only sure basis upon which a permanent reform of the Profession can rest.

I would also refer to the writings of Dr. John Thomson, late Professor of General Pathology in the University of Edinburgh, one of the oldest and ablest advocates of Medical Reform. In

the introduction to Dr. Thomson's admirable 'Lectures on Inflammation,' published in 1813, will be found an interesting historic sketch of the Profession, and reasons for the education of the Physician and Surgeon being the same. In his 'Life of Dr. Cullen,' published in 1832, Dr. Thomson has entered more fully into the subject of education, and has shown by incontestable arguments, that the education of all Medical Practitioners should be the same. I have great pleasure in referring to the enlightened views of Dr. Cullen and Dr. Thomson : they deserve the careful perusal of every medical man who feels an interest in the improvement of his profession, and more especially of those who are in any way engaged in preparing the forthcoming measure of Medical Reform.

NOTE B. p. 17.

No subject connected with medical education stands more in need of reform than the mode of conducting examinations. The value of examinations, as tests of the candidate's proficiency in medicine, has been doubted ; and, as medical examinations have been generally conducted in this country, there may be fair grounds for such doubt. The efficiency of all examinations depends upon the manner in which they are conducted ; if they are so managed as to give every candidate a fair opportunity of showing his real acquaintance with the subject of examination, and, at the same time, render it impossible for him to deceive the examiner by an exhibition of parrot knowledge got up for the occasion, there can be no question of the value of examinations. If the candidate be subjected to a special examination on *each* subject of the medical curriculum, by means of written questions and answers, in addition to the usual *vivâ voce* interrogations, and by demonstrations, experiments, or any other practical tests of which the subject of examination admits—and almost every medical subject does admit of some such test—it must, I think, be the fault of the examiners if they are unable to ascertain the candidate's pro-

ficiency. Examinations so conducted place the diffident and the over-confident on equal terms; all have an opportunity of showing what they do know. In this respect, as well as in others, the examination by writing is most useful, and should form a part of every examination in medicine.

Let our medical examinations be so managed, let the student be submitted to one or more examinations in the course of his medical studies, and there will soon be an end of the demoralizing system of "*cramming*," which I am informed by some of the medical teachers is now carried on to a most injurious extent in London. This system of deception, so much practised by medical students, is owing to various causes:—the deteriorating influence of the apprenticeship system; the almost total neglect of preliminary education on the part of the examining bodies, in consequence of which the student has acquired no habits of application before he commences his medical education; and the injudicious regulations imposed upon students, by which they are obliged to attend to too many subjects and lectures in the same season. To these may be added the *single* very imperfect *vivâ voce* examination, to which, at the termination only of their studies, candidates for diplomas and licences are subjected. I would take leave further to remark, that, in so important a subject as medicine, examinations ought to take place during the day only, for obvious reasons, as regard both the examiner and the examined.

NOTE C. p. 26.

As the Regulations of the UNIVERSITY OF LONDON regarding the Preliminary Education of Students about to commence the study of Medicine have been objected to, as requiring too much, I have thought it right to give an abstract of these regulations, to enable you to judge how far such objections are deserving consideration. The following is the MATRICULATION EXAMINATION for Students in ARTS and in LAW, as well as in MEDICINE:—

SUBJECTS OF THE EXAMINATION. CLASSICS.

THE GREEK AND LATIN LANGUAGES.

One Greek and one Latin subject, to be selected one year previously by the Committee of the Faculty of Arts from the works of the under-mentioned authors :

Homer . . . One Book.

Xenophon . One Book.

Virgil . . . One Book of the Georgics, or the Sixth Book of the *Æneid*.

Horace . . . One Book of the Odes.

Sallust . . . The Conspiracy of Catiline, or the War with Jugurtha.

Cæsar . . . The Civil War, or the Fifth and Sixth Books of the Gallic War.

Livy One Book.

Cicero . . . The treatises *De Senectute* and *De Amicitia* ;
or two of the shorter or one of the longer
Orations.

THE ENGLISH LANGUAGE.

The Grammatical Structure of the Language.

Proficiency in Composition is judged of by the style of the answers generally.

OUTLINES OF HISTORY AND GEOGRAPHY.

History of England to the end of the Seventeenth century.

The papers in Classics contain questions in History and Geography.

MATHEMATICS.

ARITHMETIC AND ALGEBRA.

The ordinary rules of Arithmetic.

Vulgar and Decimal Fractions.

Extraction of the Square Root.

Addition, Subtraction, Multiplication, and Division of Algebraical Quantities.

Proportion.

Arithmetical and Geometrical Progression.

Simple Equations.

GEOMETRY.

The First Book of Euclid.

NATURAL PHILOSOPHY*.

MECHANICS.

Explain the Composition and Resolution of Statical Forces.

Describe the Simple Machines (*Mechanical Powers*), and state the Ratio of the Power to the Weight in each.

Define the Centre of Gravity.

Give the General Laws of Motion, and describe the chief experiments by which they may be illustrated.

State the Law of the Motion of Falling Bodies.

HYDROSTATICS, HYDRAULICS, AND PNEUMATICS.

Explain the Pressure of Liquids and Gases, its equal diffusion, and variation with the depth.

Define Specific Gravity, and show how the specific gravity of bodies may be ascertained.

Describe and explain the Barometer, the Siphon, the Common Pump and Forcing-Pump, and the Air-Pump.

ACOUSTICS.

Describe the nature of Sound.

OPTICS.

State the Laws of Reflection and Refraction.

Explain the formation of Images by Simple Lenses.

CHEMISTRY.

The component parts of the Atmosphere and of Water.

The general character of the different groups of elementary bodies, namely, of the Supporters of Combustion, the Combustibles, and the Metals.

The influence of Heat upon the bulk and states of Matter.

* A popular knowledge only of these subjects in Natural Philosophy is required, such as may be attained by attending a Course of Experimental Lectures.

NATURAL HISTORY.

BOTANY.

The Characters and Differences of the Natural Classes and principal Orders of Phanerogamous Plants belonging to the Flora of Europe, in the Botanical Classification of De Candolle.

ZOOLOGY.

The Characters of the Primary Divisions of the Animal Kingdom, and of the Classes and Orders of the Vertebrate Sub-kingdom, according to the system of Cuvier.

I think you will admit, Sir, that there is nothing very extravagant in the above examination, or what the generality of students may not with ease be prepared to meet before they are of a proper age to commence the study of Medicine: certainly no subject is to be found in the above list (Greek, perhaps, excepted) with which every medical student ought not to be acquainted, and less could scarcely be required in each subject. Greek, in the opinion of some competent judges, ought not to be exacted, and perhaps it might be left to the option of the medical student to be examined in Greek, or a Modern Language. Judging from the progress which education is now making in this country generally, it is my firm belief that in the course of a very few years much more may be safely demanded than is now required by the Regulations of the University of London. Compare the meagre requirements of the above examination with those of the French Universities for the Bachelor of Arts and Sciences! In France, since 1836, no candidate for a Degree in Medicine or Surgery has been allowed to present himself for examination without possessing the Degree of Bachelor of Arts and Sciences. I trust, therefore, that it is not contemplated to fix, by the forthcoming measure, a less amount of preliminary instruction for any class of Medical Practitioners than that required by the University of London.

FINIS.